

10/5/1987

FILE COPY

All material in this file has been discussed with Jon.
a book has been put together that contains all of this
material and is in the possession of Jon Edmondson.

Milt Mathews

10-5-87

USEPA RCRA



3012732

PERSONNEL TRAINING RECORD

NAME: Jon Edmondson
 DATE OF EMPLOYMENT: 5-26-77

SOCIAL SECURITY NUMBER: 538-64-6046

SCHOOL(S)	SUBJECTS	DATES	DEGREES
HIGH SCHOOL:			
OTHER SCHOOLS:			
PREVIOUS JOB TRAINING:			
EMPLOYER:			

	DATES AND INITIALS	
PLANT ORIENTATION/INDOCTRINATION.....	9-29-87	ME
CHEMISTRY OF HAZARDOUS WASTES		
CHARACTERISTICS/IDENTIFICATION.....	9-29-87	ME
HAZARDS/SAFETY PROCEDURES.....	9-29-87	ME
SOURCES OF CHEMICAL INFORMATION.....		
PERSONNEL SAFETY		
SAFETY POLICY/WORK RULES.....	9-29-87	ME
PROTECTIVE EQUIPMENT.....	9-29-87	ME
DECONTAMINATION.....		
EMERGENCY PROCEDURES		
CONTINGENCY/SPCC PLANS.....		
PLANT MAINTENANCE (GENERAL).....	9-29-87	ME
EMERGENCY EQUIPMENT.....	9-29-87	ME
FIRE PREVENTION.....	9-29-87	ME
SPILL PREVENTION & CLEAN UP.....	9-29-87	ME
FIRST AID.....		

LAST REVIEWED

DATE	BY	DATE	BY
10-2-87	ME		

CURRENT POSITION DATE

MAINTENANCE Person

INTRODUCTION TO CHEMPRO

Welcome to Chemical Processors, Inc. Pier 91 facility. In order to acquaint you with our plant and operations, we would like to have you give all informational materials provided your careful review. It has been prepared for your benefit.

At Pier 91, we treat a variety of products including oily bilge and water ballast, mildly acidic, alkaline and phenolic solutions and waste oil. Our end products are decontaminated water which, after testing, can be discharged to the Metro sewer system, and reclaimed oil which is used by a variety of industries. We share the plant facilities with Pacific Northern Oil. They store fuel oil products and load barges which fuel the majority of ships you see in the harbor.

The Pier 91 facility is one of three plants in the Chempro family. In this package you will find a pamphlet which shows a broad overview of some of the services Chempro offers to the industrial community. It is yours to keep.

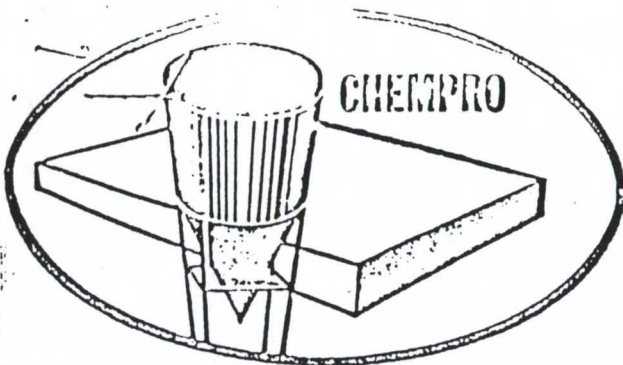
In our treatment process there are several different hazards you must protect yourself from. Such as chemical burns, steam burns, mechanical injury and the usual potential for slips, falls, and strained muscles. Use protective equipment issued for your protection. Do not perform any task until you are fully knowledgeable of the equipment and/or chemicals you will be using. If you have any questions, ask for information from your foreman or plant manager. It is easier to answer any question than to correct an injury or costly error.

- 1) A W-4 form (attached must be completed and returned to your plant manager within the first few days of your employment.

2) It is important that you correctly manage your time card. It is the document upon which you are paid.

Punch your own time card only.

[illegible]



CHEMICAL PROCESSORS, INC.
5501 AIRPORT WAY SO.
SEATTLE, WASHINGTON 98108
PHONE: (206) 767-0350

June 20, 1980

To: All employees
From: Ron West
Subject: Narcotic, Marijuana and Alcohol; Use, Possession or sale

It has come to the attention of Management that there is usage, possession and sale of alcohol and narcotics, including marijuana, on Company premises.

Please be aware of Company Rule, as posted:

LIQUOR AND NARCOTICS: Consuming, possessing or being under the influence of alcoholic beverages or narcotics on Company premises, will bring about disciplinary action, including suspension and discharge.

Marijuana is a narcotic; and use, possession or sale in the plants (or on Company premises) will result in disciplinary action, up to and including discharge. In the event an employee violates rule, law enforcement personnel may be called in for investigation and possible criminal action.

Neither the Company, nor Teamster Local #117, condones the use, possession or sale of narcotics, marijuana or alcohol.

For reasonable cause, the Company reserves the right to search all packages, lockers, vehicles and personnel either with, or without law enforcement agency personnel present.

Employees having knowledge of such activities, and not notifying company management, may be subject to any and all actions as described above.

Any person finding or suspecting an employee violating the company rule is to call 767-0350 and request a supervisor come to the facility at any time.

The safety and welfare of all employees of Chemical Processors is of prime importance.

If you have any questions regarding the posted Company rules, or the contents of this memo, please contact your Supervisor, Foreman or Company Management.

WORKER'S COMPENSATION - INDUSTRIAL INSURANCE

If you are injured while performing your job, you will receive medical and hospital care, plus financial indemnity for time you lose as a result of the injury.

Workers are compensated for injuries sustained in the course of employment and for certain occupational diseases arising out of employment. This includes payment for time lost, permanent partial disability awards and payments to dependents of employees fatally injured in the course of industrial employment. The insurance premium for this coverage is paid for by Chempro.

The majority of work accidents result from personal causes of actions - the human element (over 80%). Accidents result from improper or non-sufficient job knowledge, unsafe acts, chance taking, short cut methods, use of wrong tool or failure to follow instructions. Without exception, all employees must be concerned with always following safe work practices and with these safety rules:

- * Obey all warning tags and signs.
- * Walk - d not run - use special caution when walking on wet or oily surfaces or while going up or down stairs.
- * Wear sensible work shoes - non-skid sole shoes or boots.
- * Avoid loose clothing that can catch on some protruding object.
- * Use stairways provided. Do not jump from one level to another when stairs are provided.
- * Be alert at all times for movement of mobile equipment.
- * Watch your feet when around forklifts - avoid foot injury,
- * Horseplay, scuffling, and playing practical jokes, throwing objects, shall not be permitted, and appropriate disciplinary action will be taken if such actions are noted.
- * Report any potential accident producing situation to the foreman without delay.
- * Do not remove any guard except for repair. In such cases, equipment must be locked out at the main disconnect and be clearly tagged before the guard is removed.

- * All safety devices must be used without exception; make sure that all guards are in place before starting any equipment.
- * Keep all aisles clear of material or anything that could cause someone to trip or fall.

CHEMICAL HAZARDS

In this plant there exists a high potential for hazards due to chemicals. The following are some guidelines to lessen this potential for harm to you and the facility.

Materials will generally enter a person's body in three ways:

- 1) Skin Absorption
- 2) Ingestion
- 3) Inhalation

Many industrial chemicals are readily absorbed through the skin. It is therefore important to wear gloves, arm protection and proper protective clothing.

Ingestion of chemicals by workers is unlikely under most conditions. This can be controlled by good personal hygiene practices and prohibiting food/tobacco consumption in operating areas, and the use of proper gloves and other clothing to prevent contamination.

Inhalation is the most common route by which industrial chemicals gain access to the body. The contaminant must be airborne (dust, fumes, mist, vapors or gas). The hazard to you from this source can be reduced or eliminated if you make use of the respirators and masks that are provided. This will take your constant cooperation to safeguard yourself. Whenever you are in doubt - use respiratory personal protection provided.

Learn from your supervisor where the safety equipment is and under what circumstances it should be used. Learn all you can about the chemicals you will be working with. Use your common sense and always stay alert for the unexpected.

Keep all drums, carboys, etc., closed when not in use. Clean up spills, and store the waste in drums that are clearly labeled. When cleaning up a spill, wear an approved gas mask, especially if the spill is large or in a confined area.

If you spill solvents on your clothes, change them immediately and allow the soiled ones to dry outside, in the open. It is important to avoid fumes from chlorinated solvents.

All organic solvents can explode with great force if mixed with chemicals called oxidizers. Oxidizers, to be aware of, include Nitric Acid, Benzoyl Peroxide, Hydrogen Peroxide, and pure oxygen gas. Never allow an oxidizer and any flammable material to come close to each other. Such a mixture can be disastrous.

All solvent fires should be put out with a dry chemical-type extinguisher (code letters BC). Never use water on a solvent or electrical fire.

Stay away from acid fumes as much as you can. Keep containers of acid tightly closed when not in use to avoid emission of fumes into the air. Always wear chemical-splash type goggles when working with acids. The fumes can burn your eyes. When you have reason to dilute acid with water, add the acid to the water - not the reverse. Wear goggles.

Acids can react violently if mixed with alkalis. These alkalis are such chemicals as Sodium Hydroxide, Potassium Carbonate, and Cyanides. Never mix an acid into a used drum unless you are positive it is safe to do so.

If you get acid onto your skin or into your eyes, wash it off with lots of flowing water. Stay with the washing and flushing of your eyes for at least 15 minutes. See a doctor at once.

Alkalis can be very corrosive to the skin and eyes so the precautions pertaining to acids apply equally to alkalis. The most corrosive alkalis are Sodium Hydroxide, Ammonia, and Bleach Liquor. Alkalis feel slippery. If this is felt, wash it off the skin at once.

Neither acids or alkalis should be washed down the sewer. When in doubt about this consult your supervisor.

Heavy metal chemicals present a hazard to the environment as well as to you. The term "heavy metals" includes a number of compounds containing such substances as, Nickle, Copper, Chrome, Lead, Silver, Cadmium, Zinc, and Mercury. You must maintain personal hygiene to avoid exposure. Always wash before eating or using the restroom. Do not wear clothes which are soiled with heavy metal chemicals. Avoid dust and fumes from heavy metals. Be alert for broken bags of chemicals, report these immediately.

The problems of safety concerning unknowns must have your attention. If you do not know exactly what a chemical is, and how to handle it, do nothing with it. Ask for instructions from your supervisor.

Working with chemicals can be safe if you use the instructions which will be given to you together with the constant application of common sense.

If you want to know more about the specific chemicals you are working with, refer to the book "Dangerous Properties of Industrial Chemicals" and a booklet "The Official Chempro Primer on Chemical Safety". Each of these books are available at your plant. Some facilities have product safety data sheets available. There is a "Right To Know" law coming into effect. This in effect says an employee has the "right to know" the hazards of the chemicals he is handling. As the requirements of this law become clear, more information, as necessary, will be provided.

In the Georgetown plant, the cyanide process area is off limits to all except those personnel assigned to that area. You will be thoroughly instructed by the plant manager prior to any assignment in that area. Specialized safety procedures for working with cyanide are detailed in the operating manual for the cyanide facility.

SPILL HAZARDS

A spill, for company purposes, can be defined as a sudden unexpected release of chemical into the environment. Because of the detrimental long and short term effects of chemicals in the environment, a spill must be controlled and cleaned up as quickly as possible.

- 1) Make every effort possible to contain the spill and to prevent it from entering the sewers or storm drains or damaging the facility.
- 2) If the spill is large or if you don't know what is spilled or if you are not familiar with the hazards of the spilled material, alert other personnel for assistance.
- 3) All spills are to be reported to the plant manager. A spill plan is filed at the plant outlining procedures to be followed if a major spill occurs. Be familiar with the spill plan and be prepared to follow it promptly.

FIRE HAZARDS

A small fire can sometimes be extinguished by means of portable fire extinguishers. After you have sounded the alarm and summoned for help, try to control the fire. Use judgement. Do not endanger yourself. If you are injured, you will be of little help. Use protective equipment.

Fires in oils, gasoline, some paints, lacquers, grease, solvents and other flammable liquids require an extinguisher labeled B. Know the fire extinguishers, and where they are located. This subject will be discussed in training sessions frequently.

- * Call the fire department
- * Stay up wind from a fire
- * Do not touch chemicals or materials contaminated with chemicals
- * Determine if persons are endangered by the fire
- * Evacuate or rescue anyone immediately endangered
- * Quickly determine the source of the fire
- * Quickly define the boundaries of the fire
- * Activate the emergency system, keep communication channels open and wait for the arrival of the fire department

LIFTING

Even a physical giant may sustain serious sprains or strains such as hernias or low back pain, if he lifts or moves objects (drums and hoses, etc.) incorrectly. The object does not have to be heavy to cause back strain if you reach out too far to lift or attempt to make a lift with your back bent. Learn the safe way to lift - get set for the lift - keep the center of gravity close in to the body. Lift smoothly with feet planted firmly and avoid back injury.

- * Keep your back straight as possible.
- * Get down to the load by bending your knees.
- * Lift slowly, evenly, using your leg muscles instead of the smaller muscles of your back.
- * Keep the load in close to your body - don't jerk or twist while making the lift.
- * If the load is too heavy for you, get help

Exercise care if you use cutting or welding tools or other similar equipment. Arc welding must be screened - both in the field and in the shop or where other employees may be injured by harmful arc rays. Protect the eyes of others from painful flash burns.

Tools that have been used shall be cleaned, inspected for condition, and returned to the designated storage area.

TOOLS AND EQUIPMENT

All required tools and equipment will be provided by the company. It is the responsibility of plant management to maintain all tools and process equipment in good repair. It is the responsibility of each employee to report tools and equipment requiring repair or replacement. It is the responsibility of each employee to select and use the proper tool for the job and to not use any tool that is in unsafe condition.

See that all hand tools that you use are maintained in good condition. The use of mushroomed wedges, chisels, drills, hammers, and any other defective tool is prohibited. Such defective tools must be repaired or taken out of service promptly. Use the right tool for the job.

All electrical hand tools shall be properly grounded. Report any electrical tool that appears to be defective in any way.

Nails projecting from lumber can cause painful injuries. Bend down nails projecting from lumber and maintain good housekeeping for safety.

FORK LIFTS

All lift truck operators must comply with safe practice rules covering the operation of forklift trucks.

A careful check of the equipment should be made by each operator at the start of operation to be sure brakes, horn and the steering mechanism are in proper working order.

Wet or oily surfaces require extra care and a slower than ordinary speed.

Backing accidents usually result from failure on the part of the operator to look where he is backing. Make sure that you know what or who is behind you when backing a truck.

Operators should always look in the direction of travel and keep a good view of it when moving.

Stunt driving and horseplay will not be permitted.

The operator should come to a stop at blind corners and before passing through doorways; and then go ahead only when assured the way is clear.

Care must be used when backing around or moving loads close to drums or close to loading dock edges.

Operators should not leave trucks unattended without neutralizing the controls, shutting off the power, setting the brakes, and putting the forks down.

The safety of pedestrians and all employees working in the areas serviced by a lift truck must be considered to be the operators responsibility. Sound horn and move past them with caution.

Loads should not be raised or lowered in route while moving. See that the load is not too high for good vision.

Do not jump from lift truck while it is moving - stop it and set the brake.

Use special caution when using a lift truck to lift an employee to perform a job. Do this only with a bin or platform made for the purpose and chained to the mast.

The subject of the safe operation of forklifts will be covered frequently in special training meetings.

JOB TITLE: Maintenance
LOCATION: Chempro - Pier 91
REPORTS TO: Plant Manager

FUNCTIONS:

Responsible for the maintenance and repair of all company equipment at plant including company vehicles.

DUTIES:

- . Perform maintenance on pumps including replacing new seals and packing.
- . Replace or repair valves.
- . Maintain plant vehicles so that they are in good working order.
- . Perform welding or brazing as necessary.
- . Make plumbing changes as needed.
- . Maintain foam fire fighting system.
- . Assist in the installation of new projects and systems.
- . Troubleshoot electrical problems.
- . Perform related duties as required.

QUALIFICATIONS:

- . A knowledge of math and blue-print reading, welding, plumbing and pipefitting, and electrical work which is normally acquired through the completion of a technical or vocational school, or equivalent on-the-job training.
- . Previous maintenance work experience desirable.
- . Good manual dexterity, and mechanical aptitude.
- . Problem-solving skills.
- . Capable of climbing ladders and stairs and standing for several hours at a time.

MAINTENANCE
CHEMPRO PIER 91

QUALIFICATIONS:

- . Ability to lift up to 100 pounds.
- . Must be able to pass company's medical examination.

WORKING CONDITIONS:

Plant environment where there is exposure to chemicals, dirt, dust, noise, fumes, odors, hot and cold temperatures and machinery.

SAFETY POLICY

Chemical Processors, Inc.

General

This safety policy must be considered as a minimum standard. It cannot cover every situation. The need will always exist for common sense and good judgement to protect yourself and others from injury.

Management Responsibility

It shall be the responsibility of management to provide a safe place of employment, to provide necessary safety equipment to employees, to conduct regular safety meetings, to maintain records of safety meetings and to maintain records of accidents.

Employee Responsibility

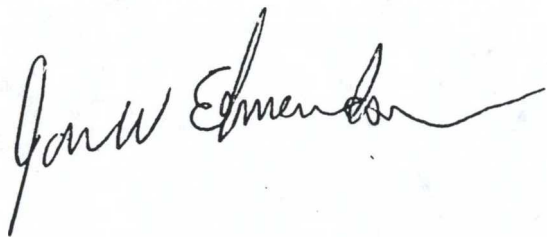
It shall be the responsibility of each employee to perform their jobs in a safe manner, to use protective equipment properly, to maintain their place of work in a safe condition, to maintain safety equipment in good repair and ready for use at all times, to constructively attend safety meetings, to report unsafe conditions and to correct unsafe acts.

Safety Policy

- A. Safety equipment shall be provided by Chemical Processors. Such equipment remains company property and is not to be removed from the place of work and is not to be used other than on the job.
- B. Prescription safety glasses (one pair) shall be provided to employees needing such equipment. Chempro will pay for the frames and lenses but not for examination and prescription services. Chempro will provide replacement units when a change of prescription is indicated or when glasses are broken on the job. Chempro will not be responsible for replacement of lost prescription glasses.
- C. Equipment which is assigned to an individual shall be maintained by that person in a clean and serviceable condition.
- D. Equipment not assigned to individuals is to be maintained in clean and serviceable condition by assignment of plant management.
- E. All personally assigned equipment shall be returned to the company upon termination.

plant management for replacement.

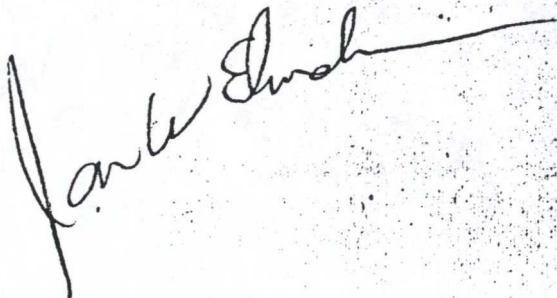
- G. A minimum of one first aid kit shall be provided at each company facility. It shall be the responsibility of plant management to assure adequate maintenance to provide first aid for minor accidents. Supplies from the first aid kits shall be utilized at the facility and are not to be removed from the facility for home use.
- H. Fire extinguishers are provided for fire fighting at Chempro facilities. Plant management shall be responsible for routine checking to assure fire extinguishers are maintained in serviceable condition at all times. Fire extinguishers are not to be removed from company facilities.
- I. Safety guards on machinery shall be removed only for maintenance purposes and promptly replaced before start up.
- J. Smoking is permitted only in areas designated by plant management.
- K. Open flames, gas and electric welding shall be allowed only in areas designated by the Fire Department.
- L. Safety chains and guard rails must be kept in place.
- M. Dirty rags must be kept picked up and placed in an approved container.
- N. Trash and debris shall not be allowed to accumulate. It shall be promptly picked up and properly disposed of.
- O. Tools necessary to safely perform jobs and maintenance of equipment shall be provided by the company. It shall be the responsibility of plant management to maintain all tools and process equipment in good repair. It shall be the responsibility of each employee to use the proper tool for the job and to not use tools in unsafe condition. Tools in unsafe condition shall be brought to the attention of plant management for repair or replacement. Tools and equipment are company property and shall not be removed from company facilities.
- P. Tools after use shall be cleaned and returned to their designated storage area.
- Q. New employees shall be issued safety equipment and trained in proper use and maintenance before they are allowed to work in the facility.
- R. New employees shall read and be thoroughly familiar with these policies before they are allowed to work in the facility.
- S. Violation of these safety rules as established by Chemical Processors may be grounds for reprimand or dismissal.
- T. Visitors shall be required to abide by these rules.
- U. As appropriate, spare safety equipment shall be maintained in clean and serviceable condition for use by visitors.



WORK RULES

- 1) Employees are to punch time cards when entering plant from dressing room after changing into work clothing, and punch out when leaving for lunch, punch in when returning from lunch and punch out prior to changing and leaving the plant. Punch your own time card only.
- 2) Employees must notify plant superintendent or office if you cannot report to work for assigned shift due to accident, illness, or other personal requirements.
- 3) If you get ill while on the job, report to your shift supervisor and request permission to be excused from further work.
- 4) Sleeping, or leaving employer's premises except on an official errand during time of employment on shift will be cause for immediate discharge.
- 5) Consumption of alcoholic beverages, drugs while on shift will be cause for immediate discharge. Reporting for work in an intoxicated condition will be cause for immediate discharge.
- 6) Protective work clothing, including hard hats, steel toed boots, are to be worn at all times while working in plant. Protective gloves and safety glasses to be worn when handling hot material and caustics safety glasses are highly recommended for use at all times in the plant.
- 7) All errors, spills, erroneous tank mixes are to be reported to the plant superintendent at once. Failure to report a mistake that you've made and attempts by you to cover this mistake can result in immediate discharge.
- 8) All tools, products, containers and equipment are the property of Chemical Processors, Inc. Employees are not to remove any property from Chemical Processors for personal use without authorization of the plant superintendent. Such unauthorized removal may subject the employee to immediate discharge. Chemical Processors will allow reasonable quantities of its products for home use, but this must be cleared with the plant superintendent in advance on each specific occasion.

- 9) No firearms will be brought on company property for any reason, violation of this rule shall be grounds for immediate dismissal.
- 10) Horseplay, wrestling or practical jokes on fellow employees are forbidden.
- 11) Boots, gloves and clothing are expected to be kept clean. If you get into a particularly messy job, clean your equipment so that it is not tracked throughout the plant.
- 12) Smoking is prohibited in the plant. Violation of this rule will be cause for immediate discharge. Smoking is allowed in the office, washrooms, and outside the perimeter fence of the company.
- 13) Accidents: If you are the victim of an on the job injury you must report this immediately to your shift supervisor or plant superintendent. If you are in need of medical attention or first aid, contact your shift supervisor.
- 14) Employees are expected to keep credit and financial obligations in satisfactory condition; more than one week of garnishment in any six month period will be cause for discharge.
- 15) Safety chains on balconys must be kept in place. Equipment without safety guards shall not be operated, the fuses removed and the switch labeled "Do Not Use Until Guard Replaced".



POLICY AND PRACTICE

CHEMPRO

SECTION: EMPLOYEE RELATIONS
SUBJECT: Absence and Tardiness

NUMBER: 406

PAGE 1 OF 2
ISSUE DATE: 7-1-86

APPROVED BY: Gary Bermensolo

REVISION DATE:

SUMMARY

The Company depends on employees to be at work on a regular basis and on time. The Company also recognizes that personal and family illnesses or emergencies may interfere and in order for the company to maintain an efficient workflow in all facilities, attendance and tardiness guidelines must be followed.

PRACTICE

Regular Attendance - is defined as being present and on time each workday except when vacation, holidays or other approved time-off is taken.

Absence - is defined as not being present during a regularly scheduled work time.

Tardiness - is defined as arriving at the assigned work station after the start of the shift or returning late from a lunch break.

Incidents - is defined as a absence or tardiness which may require disciplinary action as classified below:

- ** Absence of two or more consecutive days for the same reason will be counted as one incident.
- ** Absence due to job injury is not considered an incident for purposes of disciplinary action.
- ** If an employee leaves early or leaves for part of the shift and returns to work it will be counted as an incident.
- ** Full days of partial days of personal time-off will not be counted as an incident if arrangements were made and approved by the supervisor at least on day in advance.

Time Charged for Tardiness - Tardiness in excess of 7 1/2 minutes will result in docking of the time in 15 minute increments as follows:

Jan W. Edwards

8-11-87

SECTION: EMPLOYEE RELATIONS
SUBJECT: Absence and Tardiness

NUMBER: 406
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Minutes Tardy

Time docked

7 1/2 to 22 1/2 minutes
23 to 27 1/2 minutes
38 to 52 1/2 minutes
53 to 67 1/2 minutes

15 minutes
30 minutes
45 minutes
60 minutes

Disciplinary Action - Accumulation of more than two (2) incidents in a 30 day period or more than five (5) incidents in a six month period is considered unsatisfactory and cause for disciplinary action. The disciplinary action can be in the form of a verbal warning, a written warning, suspension without pay or discharge based on the circumstances surrounding the incident(s).

Absence Reporting - Employees are required telephone the office or plant within the first hour of the regular shift. Failure to call in will be basis for disciplinary action regardless of the standing at the time.

Absence of two days without notification is a basis for termination or assumed resignation.

PROCEDURE

A specific starting time for employees to be at their assigned work stations is established by the supervisor. Arrival at the work station after the starting time is considered tardiness.

An employee who will be absent or tardy is required to call the office or plant during the first hour of the shift. A telephone notice-call-in log is maintained in the plant office and main office to record absence and tardiness as well as to record tardiness where the employee has not telephoned.

The supervisor will take disciplinary action, when necessary, and document any disciplinary action in the employee's personnel file. Any termination decision must have the approval of the Administration Department and be in Accordance with Employee Termination policy 109.

RESPONSIBILITIES

Employees are responsible for being at their assigned work station on time and for notifying the office or plant of any tardiness or absence within the first hour of the shift.

Supervisors are responsible for monitoring attendance and tardiness records, taking appropriate disciplinary action and documenting the incidents in the employee's personnel file.

DEPT.

SHIFT.

V HERE
A ABSENT
L LATE

V VACATION
H HOLIDAY
I.E. LEFT EARLY

ABSENCE/LATE SLIP

Name of employee _____

Date of (absence) (tartiness) _____

REASON _____

(EXCUSED)

(NOT EXCUSED)

employee signature

foreman or manager signature

ABSENCE/LATE SLIP

Name of employee _____

Date of (absence) (tartiness) _____

REASON _____

(EXCUSED)

(NOT EXCUSED)

employee signature

foreman or manager signature

REQUEST FOR VACATION OR PERSONAL TIME OFF

NAME OF EMPLOYEE _____

Today's date _____

VACATION REQUESTED

Dates requested _____

PERSONAL TIME OFF REQUESTED

Reason: _____

Dates/Times requested _____

EMPLOYEE SIGNATURE _____

For Office Use

Request received by _____

Title _____

Date received _____

Time received _____

Comments _____

(APPROVED)

(DENIED)

PLANT MANAGER SIGNATURE _____

HAZARDOUS MATERIALS INFORMATION GUIDE

(For Plant Employees)

Chemical Processors, Inc. Pier 91

SUBJECT: Petroleum Base Chemicals
Safety Information

Part I of a V part safety
program for plant employees

GENERAL PRECAUTIONS

The Chempro Pier 91 facility handles a wide variety of dangerous materials. In some cases a chemical may come in contact with your skin or clothing and you may not feel it presents a health hazard because it is not immediately painful. This is a bad practice because some chemicals take several minutes to react and other may take hours or days to produce harmful effects. Below are a few general precautions to help you work with greater safety in the plant and with more confidence that these dangerous materials don't come home with you in your car, on your clothes, or on your skin.

1. If you have any questions about the dangers of any job you are about to perform. STOP!!! Contact the manager (Ron Atwood) or the plant safety coordinator (Bob Moody) for further instructions.
2. It is a good idea to designate a couple of old pairs of pants and a shirt or two as Chempro work clothes and wear them only at work. At the end of the day change back into your street clothes. This will insure that if toxic chemicals are spilled on your clothes they will stay at Chempro and won't come home with you.
3. Always wear coveralls at work. If you spill something on your coveralls which can soak through to your work clothes remove the coveralls at once. Put them in the dirty coverall can in the change room and put on a clean pair. You should have a clean pair of coveralls for each day of the week, (7).
4. Always wear steel-toed rubber boots while working in the plant. Some chemicals found at the plant can dissolve leather boots and then react with the skin on your feet. If you spill any chemical inside your boots take them off at once and wash your feet. Consult the plant manager or plant safety coordinator to determine if you need a new pair of boots.
5. Know the location of all eye wash stations and shower stations in the plant.
6. Never enter any empty tank or any other confined area before checking for explosive gases and oxygen content.
7. Smoking is not permitted in the plant except in the operations office and in building 19.
8. Personal hygiene is very important at Chempro. Always wash your hands before eating and before leaving the plant. It would be a good idea to shower at the end of each work day. There is a shower located in the change room.

PETROLEUM BASE CHEMICALS

This group of oil base materials includes waste oil, the chemicals used to treat waste oil, and emulsified oil.

Waste Oil

Waste oil may be referred to as drain oil because it often comes from draining engine crank cases, or it may be called reclaim oil because it can be treated then reused as fuel oil. Other sources of waste oil can include hydraulic oil, coolant oil, transformer oil, and cutting oil. Because incoming waste oil loads are mixed together at Chempro, and one tank of waste oil will probably contain more than one of the types of oil listed above.

Hazardous Properties of Waste Oil

1. Vapors and Mists: (Combustible)

At normal outside temperatures, waste oil vapors should not present a significant health hazard. Because waste oils are transferred from truck to tank, or vice-versa, in a closed system and because all waste oil is stored in closed tanks, very little oil vapor will escape into the air. However, during the treatment of waste oil, the oil is heated and operators may be exposed to vapors escaping from the tank vents. Exposure to these vapors may cause dizziness, headaches, nausea, and irritation to the eyes, nose, and throat. Because the composition of this vapor is unknown, there are no industrial standards regulating exposure limits. Therefore, operators should consider this material toxic and take precautions to limit their exposure to as low as possible.

2. Liquid Oil: (Combustible)

Prolonged skin contact with waste oil may lead to pimples, boils, blackheads, scaling, drying, cracking, and other skin conditions.

Waste Oil Treatment Chemicals

These include RGS, ECO, Nalco, or similar chemicals which are used in the treatment of waste oil.

The contents of these products are not identified because they are considered to be secret formulas. We receive these products in 55 gallon drums. All precautions on the drum label should be strictly followed.

Hazardous Properties of waste Oil Treatment Chemicals

RGS from the 4-Tek Company is the product most used for oil treatment. It is an irritant to skin, eyes, and nose, and has a strong ammonia-like odor. Although its' formula is unknown it should be considered toxic if swallowed. If it is splashed in eyes, rinse at once with water and contact a doctor. If spilled on skin rinse off with soap and water as soon as possible. These same basic safety rules should be applied to all waste oil treatment chemicals. Remember to read the labels to determine special hazards.

PRECAUTIONS:

Wear rubber boots, rubber gloves, coveralls, avoid skin contact, and wear an organic vapor respirator if exposed to vapors in enclosed areas. Goggles or a face shield should be worn also.

Emulsified Oil

Hazardous Properties of Emulsified Oil

Emulsified oil is a combination of lubrication oil, coolant, and water. Therefore, it is a mixture of oil and other chemicals in water. Chempro receives this mixture and separates it into oil and water.

1. Vapors and Mists

Emulsified oil is only slightly toxic in the pure form. However, Chempro receives it after it has been used and there is a good chance that it has been contaminated with toxic solvents, oils, and heavy metals. Emulsified oil should be handled like a waste oil.

Inhalation of vapor or mist may cause irritation of the eyes, nose, and throat. Contact with eyes and skin may cause irritation.

2. Liquid Emulsified Oil

Prolonged skin contact with emulsified oil may lead to pimples, boils, blackheads, scaling, drying, cracking, and other skin conditions. Contact with eyes may cause irritation.

PRECAUTIONS:

When working with emulsified oil vapors and mists wear a respirator with organic vapor filters. Also wear rubber boots, gloves, coveralls, and eye protection.

Emulsified oil is treated in a 5,000 gallon open top tank. Because the emulsified oil is heated to 190°F during treatment, use caution when working around the treatment tank. At this temperature severe burns will result from contact with the emulsified oil.

- MISCELLANEOUS CHEMICALS -

TOLUENE:

Toluene has a number of dangerous properties. It is flammable, a narcotic, toxic, and it can absorb into the skin causing drying and cracking. Toluene also produces a vapor under normal conditions which has all of the above dangers.

Toluene is a solvent used when performing a BS&W test on oil. When working with it always wear rubber gloves and keep the room well ventilated. Do not smoke around toluene.

Waste toluene should be disposed of in an approved flammable safety container. When the container is full it should be discharged into a waste oil treatment tank.

CLEANING COMPOUNDS:

Powdered cleaning compounds generally contain sodium hydroxide and/or potassium hydroxide (see page 5) . These compounds are very corrosive and must be handled with care. They can cause severe skin burns and permanent eye damage. When using this type of cleaning compound wear rubber gloves, rubber boots, coveralls, eye protection, and a dust mask. Do not sprinkle powdered cleaners up wind of other employees.

Liquid cleaning compounds can also burn the skin and cause eye damage. Use the same precautions as you would with powdered cleaners.

HAZARDOUS MATERIALS INFORMATION GUIDE
FOR PLANT EMPLOYEES

CHEMICAL PROCESSORS, INC. PIER 91

CHEMICALS USED FOR TREATING
INCOMING WASTE WATER

Part II of a V part safety program for plant employees.

PART II

CHEMICALS USED FOR TREATING INCOMING WASTE WATER

This group of chemicals includes:

GROUP 1

Sulfuric Acid (H_2SO_4)
Sodium Hydroxide (NaOH)
Hydrogen Peroxide (H_2O_2)
Potassium Permanganate ($KMnO_4$)

GROUP 2

Ferrous Sulfate ($FeSO_4$)
Calcium Chloride ($CaCl_2$)
Sodium Bisulfite ($NaHSO_3$)
Lime-Hydrated ($CaO-H_2O$)
Alum ($Al_2(SO_4)_3$)

The first group of chemicals represents the most dangerous materials in the plant. Mixing any two of these chemicals can cause a fire or explosion, and spilling any of them may result in severe floor corrosion or even fire. - Skin or eye contact with any of these chemicals can cause permanent physical damage.

The second group of chemicals are less reactive but still dangerous because they can react violently when mixed with chemicals from the first group. Also, they are all powder-like materials which create dust when handled. Care must be taken to avoid breathing these dusts.

HAZARDOUS PROPERTIES OF GROUP 1 CHEMICALS

Sulfuric Acid (H_2SO_4) liquid.

This is an extremely strong acid (low pH). Never mix sulfuric acid with anything except water (waste water). When mixing sulfuric acid and water always add the acid to the water. This will avoid spattering due to high temperatures.

When working with sulfuric acid always wear goggles, rubber gloves, coveralls, and rubber boots. If spilled, on clothes remove clothes at once and rinse out with large amounts of cold water.

If spilled on skin, rinse off at once with cold water. If you fail to notice the sting of sulfuric acid on your skin at first, it can burn under the skin causing great pain. Sulfuric acid burns heal slowly and infect easily. If it is splashed in the eyes, rinse with water at once for 15 minutes then call a doctor.

Sodium Hydroxide (NaOH) liquid or solid.

Sodium hydroxide is very strongly alkaline (high pH). It comes in two forms; 20% sodium hydroxide in water and solid bead in 50 pound sacks. For most purposes in the plant, we will use the 20% liquid sodium hydroxide. Never mix this with anything except water (waste water).

When handling liquid or solid sodium hydroxide always wear goggles, rubber gloves, rubber boots, and coveralls. If liquid sodium hydroxide is spilled on clothing, wash it off at once. Solid caustic may stick to clothing- remove it with a rag and wash at once. If liquid or solid caustic is on your skin you will not feel it right away, but it is important to wash at once because it can cause severe burns in less than 5 minutes. Caustic feels slippery on the skin.

Sodium Hydroxide (NaOH) liquid or solid. (Continued)

If splashed in the eyes, rinse with water for at least 15 minutes then call a doctor.

Hydrogen Peroxide (H₂O₂) liquid:

Hydrogen peroxide is a very strong oxidizer and an extremely dangerous chemical. Never mix it with anything except water (waste water). When handling hydrogen peroxide always wear goggles, rubber gloves, rubber boots and coveralls.

This chemical is so reactive, a very small amount in the eyes can blind you and skin contact will always lead to minor or major burns. In case of skin contact, rinse at once with water. For eye contact, rinse also with water for 15 minutes then call a doctor.

GROUP 2 CHEMICALS

Ferrous Sulfate (FeSO_4) solid.

This chemical is a grey-blue granular powder which generally comes in 50 pound bags. Mix with water or waste water only. When working with ferrous sulfate always wear a respirator with dust filters to avoid breathing the dust. Also wear goggles and gloves.

Ferrous sulfate is not very toxic but if it is spilled in eyes, on skin or clothes rinse off with water.

Calcium Chloride (CaCl_2)

Calcium Chloride is a white flake-type material which usually comes in 100 pound bags. It should only be mixed with water and emulsified oil. Calcium chloride is toxic when swallowed so always wear a respirator with dust filters when handling it. Also wear goggles and gloves. If spilled in eyes, on skin or on clothes rinse it off as soon as you can.

Sodium Bisulfite (NaHSO_3) solid.

Sodium bisulfite is a white granular powder which usually comes in 100 pound bags. It is a very strong reducing agent. If it is mixed with water which has a low pH (0-4), it will produce a gas which is very irritating to the eyes, nose, throat and lungs. Check the pH before adding to water. When working with sodium bisulfite always wear a respirator with dust filters to avoid breathing the dust. Also wear goggles, gloves and coveralls. In case of skin contact rinse off with water when you get a chance. For eye contact rinse eyes with water at once for 15 minutes then call a doctor.

Lime - hydrated ($\text{CaO-H}_2\text{O}$) solid.

Lime is a white dry powder. It is the lightest powder of any material in the plant therefore, it is most inclined to cause dust problems when handling it. Always wear a respirator with dust filters, goggles, gloves and coveralls. If spilled on the skin rinse it off as soon as you can. In case of eye contact, rinse with water for 15 minutes then call a doctor.

Alum ($\text{Al}_2(\text{SO}_4)_3$)

Alum is a grey, granular powder. This chemical also creates a lot of dust. Always wear a respirator with dust filters, goggles, gloves and coveralls. If alum is spilled on skin rinse it off as soon as you can - for eye contact rinse with water at once for 15 minutes then call a doctor.

HAZARDOUS MATERIALS INFORMATION GUIDE
FOR PLANT EMPLOYEES

CHEMICAL PROCESSORS, INC. PIER 91

INCOMING WASTE WATER

Part III of a V part safety program
for plant employees

PART III

INCOMING WASTE WATER

The Chempro Pier 91 facility recieves a variety of waste water types from regular and not so regular accounts. Because each incoming load may be different from the next we have a series of quick chemical tests we run on each load. These tests are designed to detect phenol, chrome 6, and to determine p H . In addition, each operator will be trained to notice extraordinary characteristics of any incoming load. For example, a strong odor, bright color, sludge, sewer solids, smell of gasoline, etc., should be reported to a supervisor befor off-loading.

We test each load for phenol and chrome 6 because they are toxic chemicals and they can contaminate our water tanks. Because they are toxic, opreators should use caution when handling them.

PHENOL:

If phenol is detected in any incoming load that load must be further examined by the plant manager or plant chemist. If the phenol concentration is high enough it will be treated seperately from other waste water. Phenol is very toxic to people. Ingestion of 1.5 grams can be fatal but it can also be absorbed through the skin. If phenol is spilled on the skin it must be washed off at once. Contaminated colthing must be taken off and cleaned. When handling phenol wear rubber boots, gloves, and coveralls.

CHROME 6:

If chrome 6 is detected in any incoming load it must be treated before entering a waste water tank or the primary seperator. Contact the plant manager or plant chemist for futher evaluation. Chrome 6 is toxic to people. It can cause cancer of the lungs, nose, stomach, and larynx. If it is spilled on the skin it must be washed off at once. Contaminated clothing should be taken off and cleaned. Wear rubber boots, gloves, and coveralls when handling chrome 6. Wear an organic filter respirator when exposed to chrome 6 mists.

PART III - INCOMING WASTE WATER CONT.

p H :

pH is the measure of the acidity or alkalinity of water. It is recorded as a number between 0 and 14, 7 being neutral. If an incoming load of water measures 10 to 14 or 4 to 0 contact the plant manager or plant chemist for further instructions. When handling acid or alkaline waste water wear rubber boots, gloves, goggles, and coveralls.

HMIS EMPLOYEE QUIZ

This quiz will serve as a record of your training in the Hazardous Materials Identification System (HMIS) and as such will be placed in your permanent employment file.

NAME: Jon W Edmendsen SS# 538-64-60618

PLANT: Pier 91 JOB: MAINTANANCE

1. What do the initials HMIS mean? Hazardous Materials Identification System

2. What three types of hazards are rated by the HMIS?

1. Health
2. Flammability
3. Reactivity

3. What do the letters in the personal protection equipment section of the label represent?

What personal protection equipment to wear

4. What should you do if you see the letter "X" in the personal protection equipment section of a label? ask your supervisor for guidance

5. Which type of hazard is represented by each of the three colors listed below?

1. red: Flammability
2. blue: Health
3. yellow: Reactivity

Continued

HMIS EMPLOYEE QUIZ

Continued

6. What must you carry with you at all times in the plant?

wallet card

7. Write the correct number next to the degree of hazard which it represents.

1

slight hazard

3

serious hazard

4

severe hazard

0

minimal hazard

2

moderate hazard

8. What is the difference between a chronic health hazard and an acute health hazard?

CHRONIC HEALTH HAZARD THING THAT TAKE TIME

ACUTE HEALTH HAZARD ARE IMMEDIATELY

9. In addition to asking your supervisor and checking your wallet card, what is another way to check

the meaning of a rating or personal protection code on an HMIS label?

HAZARD MATERIALS IDENTIFICATION SYSTEM POSTER

COMMENTS ABOUT THE HMIS TRAINING PROGRAM: